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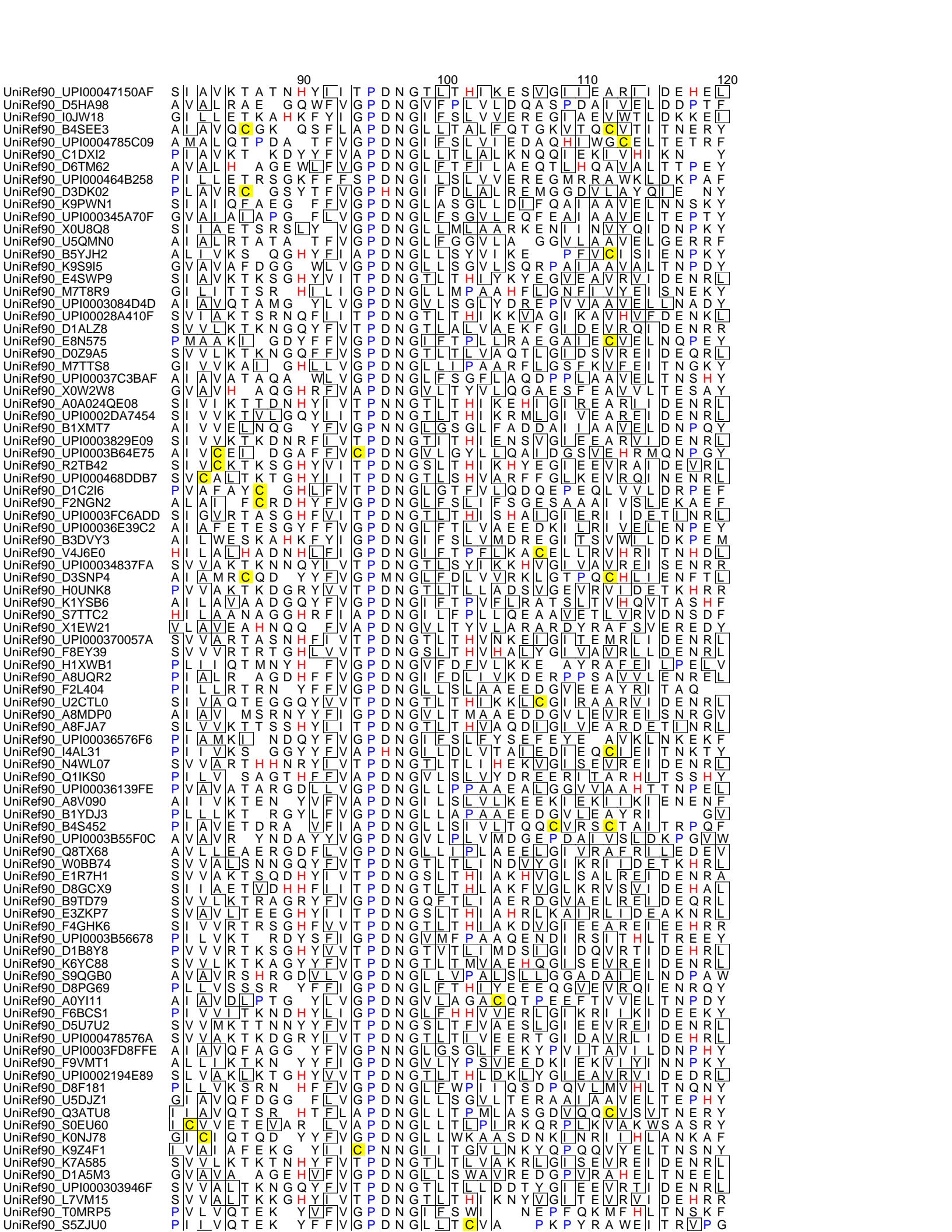
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I S L L S D F D L Q D G Y V A E M K A V I L S I A P Q A R I I D I T H  
K N R I I T L L T D F G G Y D D P F V G Q M K G V I L K I N P N V K I I D I T H  
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M F K Q L V Q T D F G V S D G A V S A M Y G V A I S V D P E V R I F D L T H  
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I V V L L T D F G G Y Q D G F V G V M K G V I K S L S T H V T L I D L A H  
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130 140 150 160

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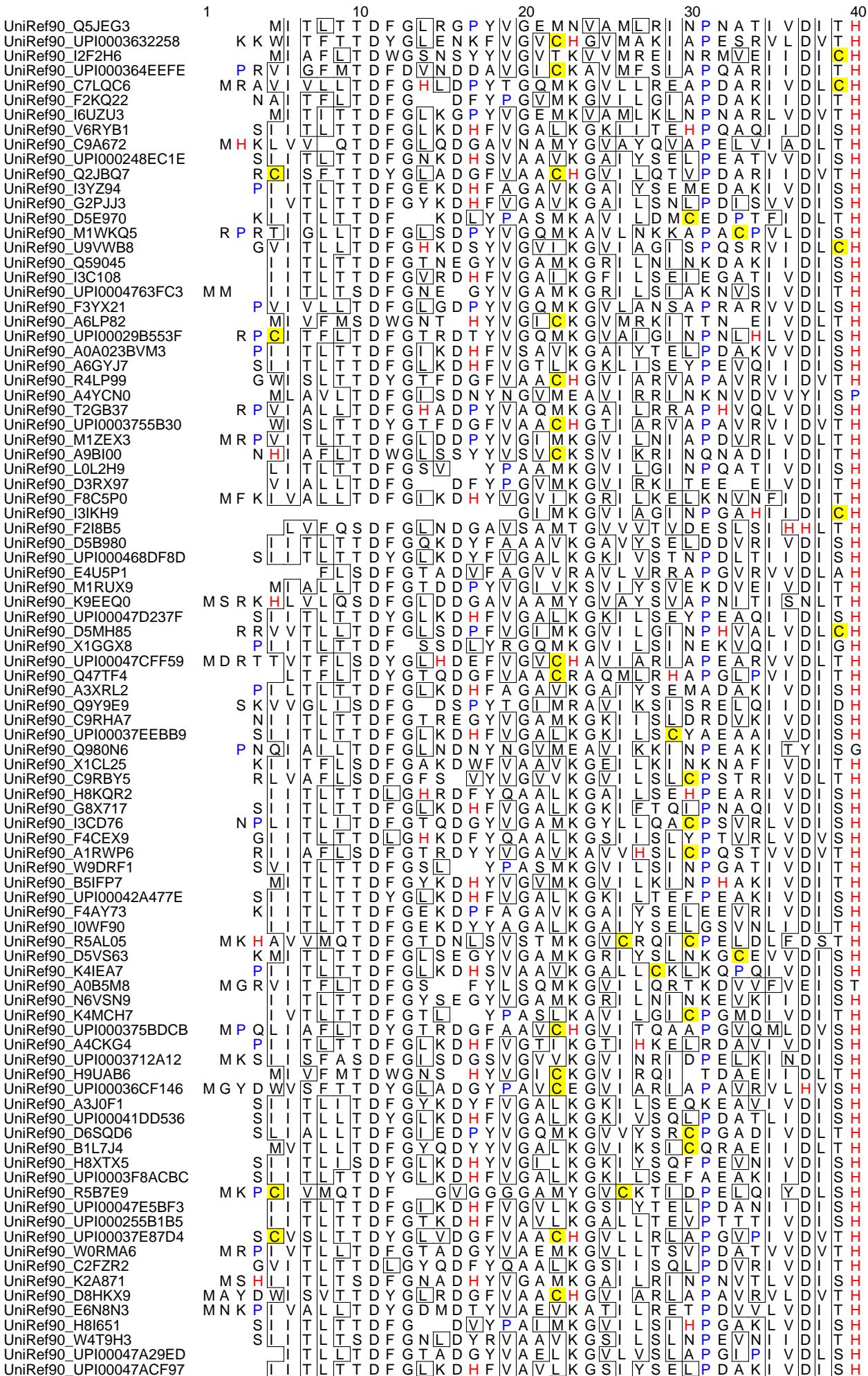
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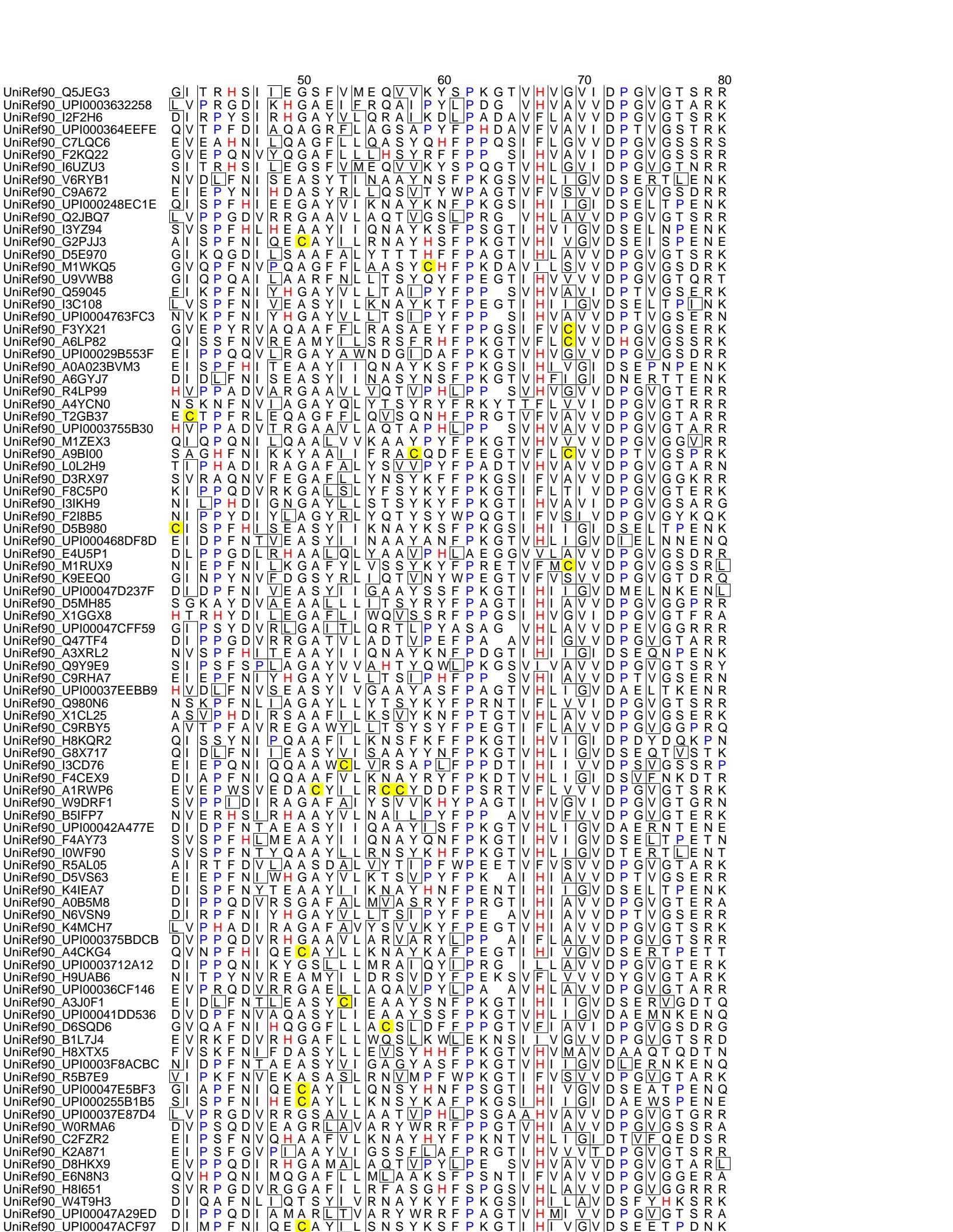


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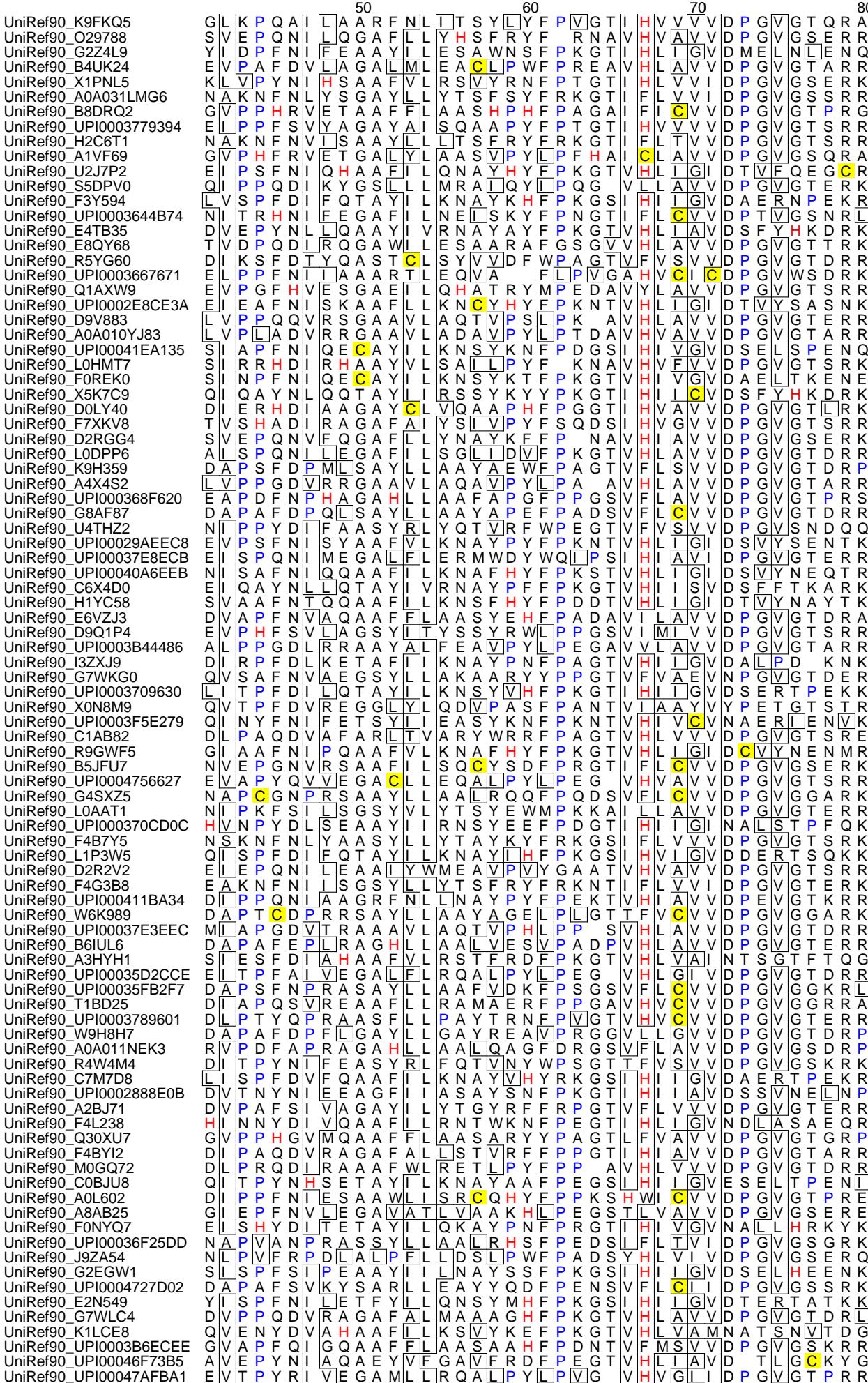
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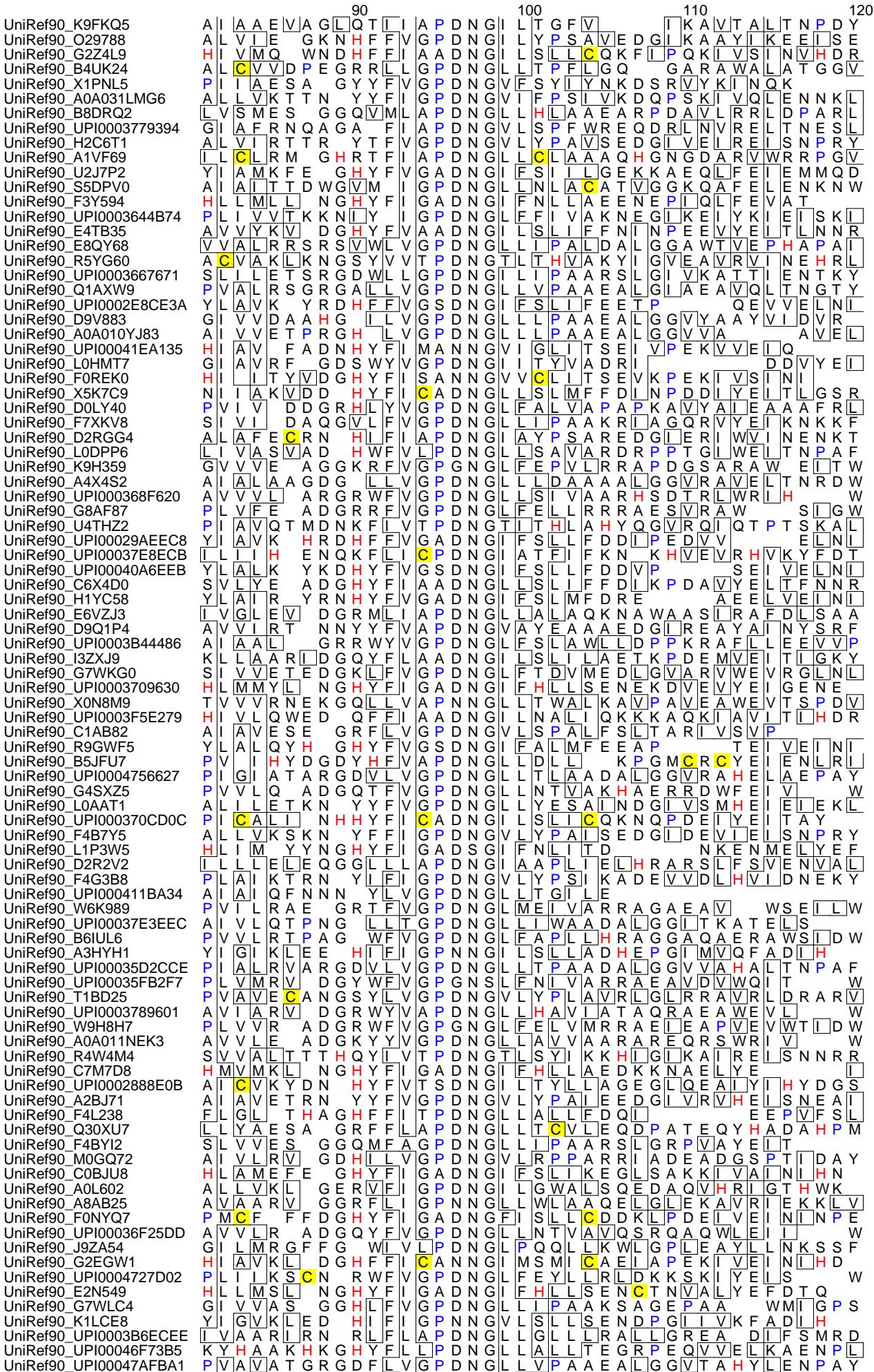
50                60                70                80



This figure displays a sequence alignment of UniProt entries, likely proteins, across 80 columns. The alignment is color-coded to highlight conserved regions: red for one set of保守位点, yellow for another, and blue for a third. The sequences are represented by single-letter amino acid codes. Conserved regions often align between different entries, indicating evolutionary pressure to maintain specific residues at those positions.

The alignment shows various domains and motifs, such as:

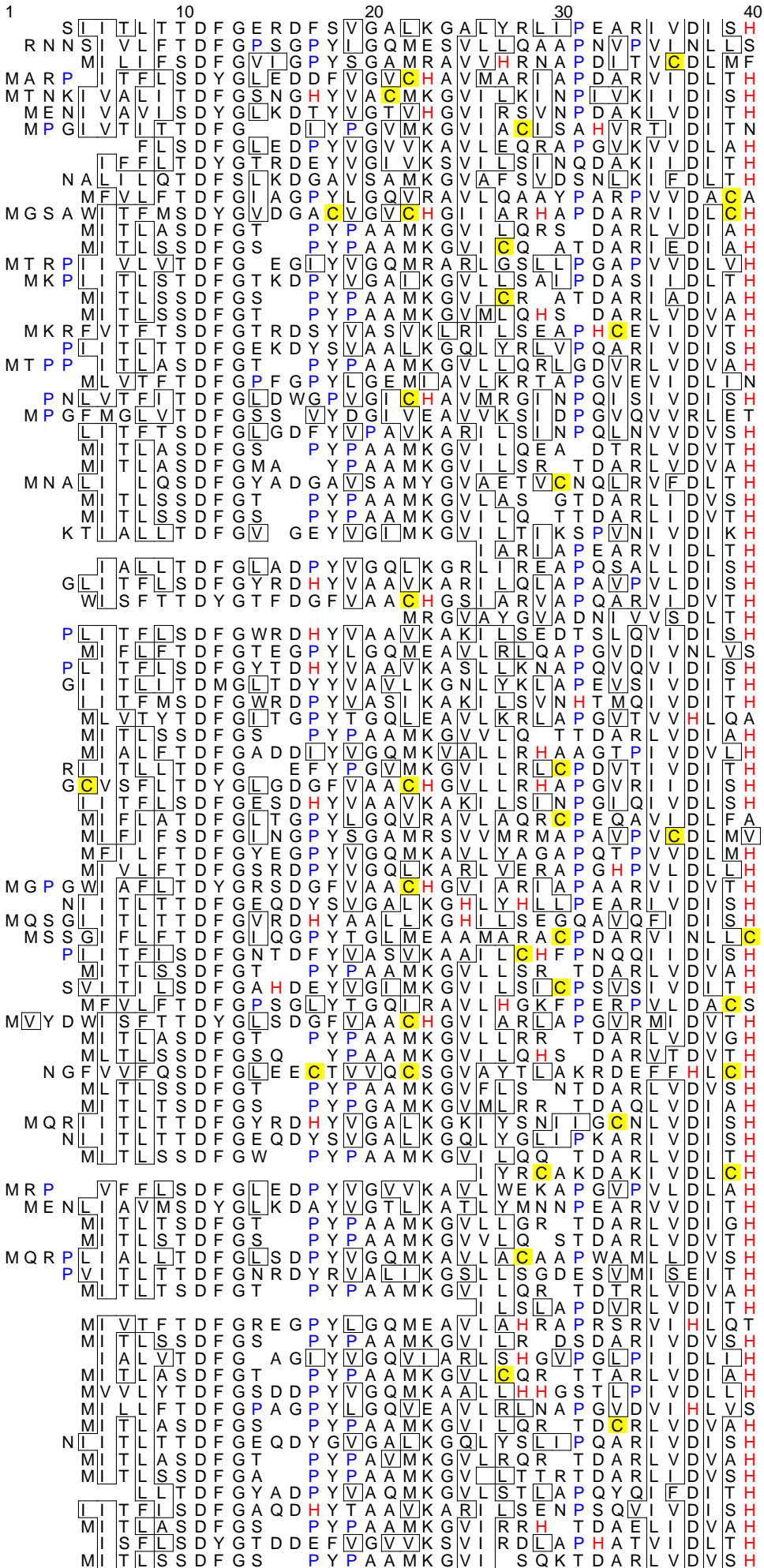
- UniRef90\_K9FKQ5: Contains a C-terminal domain with blue-highlighted segments.
- UniRef90\_O29788: Shows a central blue-highlighted region.
- UniRef90\_G2Z4L9: Features a large yellow-highlighted segment in the middle.
- UniRef90\_B4UK24: Has a blue-highlighted segment at the N-terminus.
- UniRef90\_X1PNL5: Contains a blue-highlighted segment in the middle.
- UniRef90\_A0A031LMG6: Shows a blue-highlighted segment at the N-terminus.
- UniRef90\_B8DRQ2: Features a blue-highlighted segment in the middle.
- UniRef90\_UPI0003779394: Shows a large yellow-highlighted segment in the middle.
- UniRef90\_H2C6T1: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_A1VF69: Shows a blue-highlighted segment in the middle.
- UniRef90\_U2J7P2: Features a blue-highlighted segment in the middle.
- UniRef90\_S5DPV0: Shows a blue-highlighted segment in the middle.
- UniRef90\_F3Y594: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_UPI0003644B74: Shows a blue-highlighted segment in the middle.
- UniRef90\_E4TB35: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_E8QY68: Shows a blue-highlighted segment in the middle.
- UniRef90\_R5YG60: Features a blue-highlighted segment in the middle.
- UniRef90\_UPI0003667671: Shows a blue-highlighted segment in the middle.
- UniRef90\_Q1AXW9: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_UPI0002E8CE3A: Shows a blue-highlighted segment in the middle.
- UniRef90\_D9V883: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_A0A010YJ83: Shows a blue-highlighted segment in the middle.
- UniRef90\_UPI00041EA135: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_L0HMT7: Shows a blue-highlighted segment in the middle.
- UniRef90\_FOREKO: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_X5K7C9: Shows a blue-highlighted segment in the middle.
- UniRef90\_DOLY40: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_F7XKV8: Shows a blue-highlighted segment in the middle.
- UniRef90\_D2RGG4: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_L0DPP6: Shows a blue-highlighted segment in the middle.
- UniRef90\_K9H359: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_A4X4S2: Shows a blue-highlighted segment in the middle.
- UniRef90\_UPI000368F620: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_G8AF87: Shows a blue-highlighted segment in the middle.
- UniRef90\_U4THZ2: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_UPI00029AEEC8: Shows a blue-highlighted segment in the middle.
- UniRef90\_UPI00037E8ECB: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_UPI00040A6EEB: Shows a blue-highlighted segment in the middle.
- UniRef90\_C6X4D0: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_H1YC58: Shows a blue-highlighted segment in the middle.
- UniRef90\_E6VZJ3: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_D9Q1P4: Shows a blue-highlighted segment in the middle.
- UniRef90\_UPI0003B44486: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_I3ZXJ9: Shows a blue-highlighted segment in the middle.
- UniRef90\_G7WKG0: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_UPI0003709630: Shows a blue-highlighted segment in the middle.
- UniRef90\_X0N8M9: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_UPI0003F5E279: Shows a blue-highlighted segment in the middle.
- UniRef90\_C1AB82: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_R9GWF5: Shows a blue-highlighted segment in the middle.
- UniRef90\_B5JFU7: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_UPI0004756627: Shows a blue-highlighted segment in the middle.
- UniRef90\_G4SXZ5: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_L0AAAT1: Shows a blue-highlighted segment in the middle.
- UniRef90\_UPI000370CD0C: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_F4B7Y5: Shows a blue-highlighted segment in the middle.
- UniRef90\_L1P3W5: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_D2R2V2: Shows a blue-highlighted segment in the middle.
- UniRef90\_F4G3B8: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_UPI000411BA34: Shows a blue-highlighted segment in the middle.
- UniRef90\_W6K989: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_UPI00037E3EEC: Shows a blue-highlighted segment in the middle.
- UniRef90\_B6IUL6: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_A3HYH1: Shows a blue-highlighted segment in the middle.
- UniRef90\_UPI00035D2CCE: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_UPI00035FB2F7: Shows a blue-highlighted segment in the middle.
- UniRef90\_T1BD25: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_UPI0003789601: Shows a blue-highlighted segment in the middle.
- UniRef90\_W9H8H7: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_A0A011NEK3: Shows a blue-highlighted segment in the middle.
- UniRef90\_R4W4M4: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_C7M7D8: Shows a blue-highlighted segment in the middle.
- UniRef90\_UPI0002888E0B: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_A2BJ71: Shows a blue-highlighted segment in the middle.
- UniRef90\_F4L238: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_Q30XU7: Shows a blue-highlighted segment in the middle.
- UniRef90\_F4BYI2: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_M0GQ72: Shows a blue-highlighted segment in the middle.
- UniRef90\_C0BJU8: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_A0L602: Shows a blue-highlighted segment in the middle.
- UniRef90\_A8AB25: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_F0NYQ7: Shows a blue-highlighted segment in the middle.
- UniRef90\_UPI00036F25DD: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_J9ZA54: Shows a blue-highlighted segment in the middle.
- UniRef90\_G2EGW1: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_UPI0004727D02: Shows a blue-highlighted segment in the middle.
- UniRef90\_E2N549: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_G7WLC4: Shows a blue-highlighted segment in the middle.
- UniRef90\_K1LCE8: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_UPI0003B6ECEE: Shows a blue-highlighted segment in the middle.
- UniRef90\_UPI00046F73B5: Contains a blue-highlighted segment at the N-terminus.
- UniRef90\_UPI00047AFBA1: Shows a blue-highlighted segment in the middle.



130            140            150            160

UniRef90_K9FKQ5	W Y P E P S N T F H G R D I	F A P T A A H L A N G I P I G E L G T		
UniRef90_O29788	L V I G E L S S T F H G R D I	F A P A A A M V V R G D Y T Y F E E I N K E E L		
UniRef90_G2Z4L9	F T D K V S D [ ]	D V L V R V A T H I A K G G L M H I F G T E I K Q I K E		
UniRef90_B4UK24	L A A P R T A T F H G R D I	F A P A A L Y L A R G G T P A A L G R E V A D P		
UniRef90_X1PNL5	L K R L S S T F H A R D I	F G P V A A R L S S K G S S P E V L G I M I K D Y		
UniRef90_A0A031LMG6	F L S P L S N T F H G R D I	F A S A A A Y L S L D V N I D I F G P E I N L N T L		
UniRef90_B8DRQ2	F D S Q S A T F H G R D T L A P L A A R L A G G E S L A A F G D P V L P T D L			
UniRef90_UPI0003779394	W L S D H S A T F H G R D			
UniRef90_H2C6T1	L S Q R I S N T F H G R D I	I F S V A A A L L S L R V R P E V M G P S L S M E D L		
UniRef90_A1VF69	V S G N P S A T F H A R D I	M A P A A A K L A T G T P P E A L G E E M P P A		
UniRef90_U2J7P2	L R F L H P F L A D I	L V K P A T C H L A E G N P I E D L G S A I D P L Q K		
UniRef90_S5DPV0	I I P H E G N T F H A R D I	F A P F A G Y L A S G Q K L E D F G A E L N L E D L		
UniRef90_F3Y594	D I P I T L F P T L N V	F P S V V E K V Y K G L S P E Q I G V P T D		
UniRef90_UPI0003644B74	F G N E I S M T F H G R D I	F A K V A A I L L S L G F K P D F L G L P I		
UniRef90_E4TB35	F D D E V N F T A T D V L V P A A V H	L H N G G L P E V I G R V Y E P K K I		
UniRef90_E8QY68	R A G S V D P T F H G R D L	M A P A V A H L V E G G P A E A L G P R H D P D Q L		
UniRef90_R5YG60	K T T A Q C N [ ]	F V A Y C A A K L A A G I T Y E E V G P E Y P I E E I		
UniRef90_UPI0003667671	I R T P I S Q I F Q G R D I	F A P A A A A H L S N G V S F D E F G T S I D V N N L		
UniRef90_Q1AXW9	H L H P V F S S T F H G R D I	F A P A A A A H L A A G L E M G R L G E R I A A D S L		
UniRef90_UPI0002E8CE3A	L Q D L K F L H P F L A D I	F V K A A C H L A S G G S L K E I G		
UniRef90_D9v883	T P V P S A T F H G R D I	F A P V A A H L A L G A H P G S F G P A I R D L		
UniRef90_A0A010YJ83	T E V A P A R T F H G R D L	F M P A A A R L V N G A S A A S L G P A V R P D T L		
UniRef90_UPI00041EA135	L P N S V D G A F P V L D	V F V K V A C H I A R G G K L E V I G R D F K A L K D		
UniRef90_L0HMT7	Q L E P K S T T F H G R D I	F A P A A A H D M G R S		
UniRef90_FOREKO	P D T K D G S F P T Y V	F I K A A C H L A R G G K M E V V G K P F		
UniRef90_X5K7C9	F D D Q V N F T S T D I	F V P V A A H L A K G G I P E V V G K K T D		
UniRef90_DOLY40	P T V S S T F H G R D V	F A A A A A A L A S G V P A A Q A G P Q V E L		
UniRef90_F7XKV8	M L E V S A T F H G R D I	F A P V S A H L S C G A S A D E V G E R V		
UniRef90_D2RGG4	V T G V L V S S T F H G R D V	F A P G A Y I A S I G G L K E V A E P Y E G D		
UniRef90_L0DPP6	R R V P V S A T F H G R D I	L A P A A A H L L L G G E P S E L G P		
UniRef90_K9H359	A P D V L S A S F H G R D I	F A P V A A G L A T A G A D A M A G E R L S P L P L		
UniRef90_A4X4S2	L G A D V S A T F H G R D I	F A P V A A R L A L G A P L A D A G P A V E P S T L		
UniRef90_UPI000368F620	Q P E T L S A T F H G R D I	F A P I A A D I A R G		
UniRef90_G8AF87	R P E R L S A S F H G R D L	F A P V A A S L A M G N P V A L E P V D P A G L		
UniRef90_U4THZ2	A A F N E E H T F R G R D L	Y T Y L G A A L A S G Q P F A D L G P L T T P D E L		
UniRef90_UPI00029AEEC8	M Q D L K Y L H F P L V D	F V K A A T H L A K G G K L K D I G L P V		
UniRef90_UPI00037E8ECB	I S H H I S N T F H G R D I	M A P I A V Q L V K G G N W E D F G P S V D D L Q V		
UniRef90_UPI00040A6EEB	M Q D L K F L H F P L S D I	F A K A A S H L A K G G K L K D I G I P V		
UniRef90_C6X4D0	F D D E V R F T S T D I	F A P A A V H L Q N G G L P E V I G R K F K P K E L		
UniRef90_H1YC58	M Q D L K F L H F P L A D I	F V K A A C H L A Q G G S L Q Q I G L P I N T L E		
UniRef90_E6VZJ3	M P N R V S H T F H G R D V	V L A P L A A W L A L G G K P G E L L G R E I D P E T L		
UniRef90_D9Q1P4	N S W P L S Y T F H G R D V	F V A P A A A L I L A K G V P P S Q F A T P I P A G S L		
UniRef90_UPI0003B44486	P R P P G A H T F H G R D R	F A P A A A H L A L D L P P E A L G P E V A P E G L		
UniRef90_I3ZXJ9	D P F S N F P T R D I	F V P V A C H L V R G G T L S L V G N A T E		
UniRef90_G7WKG0	T R S G D P V T F N G V E	V Y G P V G A L I A A G A D P A V G G P E V S D P		
UniRef90_UPI0003709630	P V T L F P V L D F F P K I V I S K I	G N N I P L D K I G K K T		
UniRef90_X0N8M9	M N Q P V T P T W Y G K D	V V V A C G A H L A A G V A P S A V G P K I D V A K L		
UniRef90_UPI0003F5E279	L E D T S D M	N V F A T V V A C H L A K G G N I S V I G K E I E A L S		
UniRef90_C1AB82	V P I S A S P T F H G R D V	F V P V A A R L A Q G T P L D A L G E V F F H S P		
UniRef90_R9GWF5	I Q D L K H L H F P L T D I	F I A K A C C S I A A G Y P L K S I G I P V E H L Q		
UniRef90_B5JFU7	D P Q I R S N T F H G R D I	F A P A A A M L A A G H N P G E F G M A L P		
UniRef90_UPI0004756627	R L I A V S S S F H G R D I	F A P A A A H L V N G A E L A D F G P A I T P L P L		
UniRef90_G4SXZ5	R P E N C S M S F H G R D L	F A P V A A R L A L G Q A A D D L K P		
UniRef90_L0AAT1	L N I N I S R T F H G R D V	F V A P S A A L L S L N E N I S L F T K N I D K I		
UniRef90_UPI000370CD0C	U P E G I D S L F P M K N	C F V P V A C H L A R G G V P A L L G K R S E M K Q L		
UniRef90_F4B7Y5	L S K N I S R T F H G R D I	F A T T A T G F A S A G V D I H T F G P K I S K D E L		
UniRef90_L1P3W5	K H Q Y P S E L F P T L F	V F P S I V Q Q L Y N N V P L A K I G T K T E		
UniRef90_D2R2V2	F R A S I S S T F H G R D I	F A P V A A Y L A A G G E P S S V G P V V E T Y E P		
UniRef90_F4G3B8	L S K A I S N T F H G R D I	F S I S A A L L S L R V P M D T L G S K I S E D R I		
UniRef90_UPI000411BA34	R P E S L S C S F H G R D L	F A P V A A S L A L G K S V N		
UniRef90_W6K989	U P I 00037E3EEC	S F H G R D L F A P V A A R L T L D G Q A E G T L L D P A T L		
UniRef90_B6IUL6	R P A S L S A S F H G R D L	F A P V A A R L A R G E P P P G T P L S P A A L		
UniRef90_A3HYH1	L K D T T F P A K D I	L A P I A A K V A S G A A I H D F G G P L		
UniRef90_UPI00035D2CCE	R F P A P S T T F H G R D V	F A P A A A H V L N G V D L A E L G P P V A P L R L		
UniRef90_UPI00035FB2F7	L P D R L S A S F H G R D L	F A P V A A R L A R G E A P		
UniRef90_T1BD25	E L P H V G A T F D G R D L	F A P A A G R L A G G A T L R S L G E A		
UniRef90_UPI0003789601	R P E Q A S P S F H G R D I	F A P V A A A L A C G V K P G Q A N P A I D P Q S L		
UniRef90_W9H8H7	R P E R L S A S F H G R D L	F A P V A A R L A R G E P V P G T P V A P K G V		
UniRef90_A0A011NEK3	H P E R L S A S F H G R D L	F A P V A A R I A A S G		
UniRef90_R4W4M4	Q N T E L S Y T F H G R D V	Y A Y T G A K L A S G I N F E E V G P E L S V D G I		
UniRef90_C7M7D8	K G E Q S T E L F P T L Y S F P L I A Q K I	C E N I P L N K I G K K T D		
UniRef90_UPI0002888E0B	M R S N D L F V Y C A Y Q L	F E G R K L K N M G T K A T Q L		
UniRef90_A2BJ71	F L K P V S M S F H G R D			
UniRef90_F4L238	P V P A E S S F P I K D	V F A Q S V W H L T Q G Q S F D Q F A E P I		
UniRef90_Q30XU7	Q T V P P S A T F H G R D I	F A P L A A M L R R G P A T G L P A H P V R P E D I		
UniRef90_F4BYI2	P H P G A S S T F H G R D V	F A P A A A L I A A G Q P P A S L G P R V R P V D L		
UniRef90_M0GQ72	V E N P A S T F H G R D L	F V F A P A A A D A H D V A P D E L G S P L D T D D L		
UniRef90_C0BJU8	T L V T S F P V L D	V F I H V A A H I A R K G T L E V I G S P I S		
UniRef90_A0L602	P A S A T F H G R D L	F A P V L V D W L N Y R D L N R I G P A I Q V A Q C		
UniRef90_A8AB25	R Y S S H T F H G R D L	F V P A G A F L E C G G G L E E L G P E T S L T P L		
UniRef90_F0NYQ7	A I D G L S P V K D I	F I P V A C H L A R G G V M N L V G N P		
UniRef90_UPI00036F25DD	K P E Q C S M S F H G R D L	F A P V A A R I A C N T		
UniRef90_J9ZA54	P E G N S S P T F Q A R D F F A P A L I R L I Q G T P I L D F S S P I R A E Q L			
UniRef90_G2EGW1	K I E T S F P V L D	V F V K V A C H I A R G G T L E V V G K V I D A I K P		
UniRef90_UPI0004727D02	V P E K L S A S F H G R D L	F A P V A A E L A Q S Q T A K N L G R S V D P N R I		
UniRef90_E2N549	P S T P L F P T L Y S F T S L A E Q Y K E T P L N Q I G I P I E			
UniRef90_G7WLC4	F F E G A A P T F A G R D V	F A P A A A V L A S G G D P G S F G P A V D P A G L		
UniRef90_K1LCE8	V V Q Q S T F P A K D I	L A P I A A K V A S G A A I H D F G G P L		
UniRef90_UPI0003B6ECEE	I P D N A S A T F H G R D I	F A P L A A R L A K G E P L E K L G I P I R K D S L		
UniRef90_UPI00046F73B5	M P F P A K D L I A P A A V F L A K G G D L E V L G E R T S			
UniRef90_UPI00047AFBA1	R Q Q S I S T T F H G R D I	F A P A A G H L L A G V P I A D L G P A A D		

UniRef90\_K9FKQ5  
UniRef90\_O29788  
UniRef90\_G2Z4L9  
UniRef90\_B4UK24  
UniRef90\_X1PNL5  
UniRef90\_A0A031LMG6  
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UniRef90\_R5YG60  
UniRef90\_UP10003667671  
UniRef90\_Q1AXW9  
UniRef90\_UP10002E8CE3A  
UniRef90\_D9V883  
UniRef90\_A0A010YJ83  
UniRef90\_UP100041EA135  
UniRef90\_L0HMT7  
UniRef90\_FOREKO  
UniRef90\_X5K7C9  
UniRef90\_D0LY40  
UniRef90\_F7XKV8  
UniRef90\_D2RGG4  
UniRef90\_L0DPP6  
UniRef90\_K9H359  
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UniRef90\_UP100029AEEC8  
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UniRef90\_UP100040A6EEB  
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UniRef90\_C1AB82  
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UniRef90\_B5JFU7  
UniRef90\_UP10004756627  
UniRef90\_G4SXZ5  
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UniRef90\_UP100037E3EEC  
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 M I T I A S D F F G T P Y P A A M K G V I L Q R T D T R L V D I A H  
 P I T L T S D Y G I L D H Y L A S V K G A L L S E S P D F T L V V D I S H  
 M I G L F T D F G I L G P Y L G Q V R I V L Q Q Q A P N I P V V N L M A  
 I A L V T D F G D G L Y V G Q M R A R L G A L L P E L P L I D L V H  
 M V H L A H  
 I I T L T T D F G T K D H F V S A I K G A I H C E L E H P I I V D I S H  
 M S D F G Y F D P Y V G I V K G V I K S N S C N V E I I D L T H  
 P P V V T L M T D V G H G D E L V G V M H S V I A Q M A P Q A R V I D L T H  
 M I T L A S D F F G T P Y P A A M R G V I H R R S D A T V T D V A H  
 M I T L A S D F G S P Y P A A M K G V I L Q K S D A R I V D V T H  
 M I T L A S D F G S P Y P A A M R G V I L A R E S D A R L H D V A H  
 M I T L A S D F G T P Y P A A M K G V I L L R R A D A R L V D V G H  
 M I T L S S D F F G T P Y P A A M K G V I L K Q C D A R L V D V A H  
 M Q R I T L T T D F G Y T D Y Y V G V L K G K I Y S N I Q N C N V V D I S H  
 M I T L A S D F F G T P Y P A A M K G V L C Q R T D A R L V D V A H  
 M I T L A S D F G E P Y P A A M K G V L L S R T D A Q L V D V A H  
 M I L L Y T D F G L E G P Y V G L L H R V I A G R V A A T P I V D L L M H  
 M I T L A S D F G S P Y P A A M K G V V R R H T D A E I V D I A H  
 M T R T I A L F T D F G S Q D I Y V G Q L H A A A Q S A R S D C P L V D L F H  
 M K K T I F A I V T D F G F D Y S V A S M K G L I L S K F P Q A N I I D I D H  
 V I T L L S D Y G L E T S A V G A I K G T L M K G C P G V Q L I D L T H  
 R P F I S L A T D F G A A Y T A V C A G V M Y G I V P D A N V L V L S D  
 M I T L A S D F F G T P Y P A A M K G V L V Q R T D A R L V D V A H  
 V I T F T S D F G Y T D H Y V A A V K A S I L S L Q P Q A T I V D I S H  
 M S D L I G T T D D S V A Q C K G L M L S I C P G V T I V D V N H  
 M I T L A S D F F G T P Y P A A M K G A I L G R C Y D A R L V D V S H  
 M I T L A S D F F G T P Y P A A M K G V I L G Q R T A A R V V D I A H  
 M I T L T S D F G S P Y P A A M K G V I L L Q R T D A R L V D V A H  
 M I T L A S D F G T P Y P A A M K G V I L Y S Q S D A R V V D V T H  
 M I T L A S D F G S P Y P A A M K G V I L L Q R T D A R L V D V A H  
 M I T L A S D F G T P S P Y P A A M R G V I C S R S D A R I E D V A H  
 I L T T D F G G D S G G F V A Q L K A E I L K L F G E V K I V D I T H  
 M I T L A S D F F G T P Y P A A M K G V L C Q R T D A R L V D V A H  
 W I N F L S D Y G L D D T C V G V V H G V I A R H A P G A R V V D V C H  
 M I T L A S D F G S P Y P A A M K G V I L L S R A D D P R L V D V A H  
 A L V T D F G A G P Y L G Q M Q A L L D A C L P D H A V I D L V H  
 R R P I A F M S D L G I T D D S V A Q C K G L M L S V C P D V T I V D I C H  
 L I A L T D F G S T G P Y M Q G M R A V L A T A A P G V A V I D L F S  
 T I L S S D F F G T P Y P A A M R G V I L S Q R T A T R L V D V A H  
 M I V L Q T D F S N T W G G V I A S M K G L I K S V N D S L D I I D L T H  
 I T F M S D F G T T D H Y V A A V K A R I L S T L P S Q L I V D I S H  
 M S G P V L F T D Y G L D G P W V G L L H A V I R Q A R P G A G I I D L Q H  
 P I A L L T D F G V G P Y V G Q L H L L L A S Q A G D R P V D L I H  
 P I T L T T D W N L N D F Y T G T L K G K I L S L C P N A I L V D I T H  
 I L L V T D F G P G I Y V G Q M R A R L D A L V P D L P V I D L V Q  
 N F V T L T S D I G Y Q D Y L V G A V K A Q L L Q V N A D L Q L V D I S H  
 M I T I A T D F G S P Y P A A M K G V L C Q R T D A R L V D V A H  
 V I L L V T D F G P G I Y V G Q M R A I L A A L A P D L P V I D L V Q  
 M T G S W I N F L S D Y G V D D A C V G V C H G V I A R H A P S A R V L D V C H  
 Q A P L I A L L T D F G L V D P Y V G Q M R S V L M S A A P G V P L L D V S H  
 P I A L L T D F G L A D P Y V G Q M Q S V L L S A A P G V P L M D I S H  
 S I I T L T S D I G L Q D Y L V G A I K G Q L W Q H C P G A P V M D I T H  
 M I T L A S D F F G T P Y P A A M R G V I F R R T E A R I I A D I I S H  
 M I A L V T D F G P G P Y I Q G Q L L A A G I P G L P V I N L L D  
 M I T L T S D F F G S P Y P A A M K G V I R H H T D A E M V D I A H  
 Q A P L I A L L T D F G L A D P Y V G Q M K S V L L S A A P G V A L L D I S H  
 T P A L V T L T S D L G A A Y A A Q M K A V L A H T L P P G H V I D L T H  
 K C V T M L T D F G L S D E T V A C C K G V L L S K G L K L P I I D I S H  
 I L T T D F G S D S D G G F V A Q L K A E I L K I F G E I I N I I D I T H  
 M Q R P I L A T Q S D Y G T A D G R A A A L N G N I L K I A P E A D I Y S V L D  
 M R P I C L F T D F G T T G P Y V G Q V K A A L H V H A P G V P V I D L M A  
 M F L I F T D F G W R G P Y V G Q V K A V L A T R C P T H P I I D L M H  
 M I T I A S D F F G S P Y P A A M K G V L C Q R S P E T R L V D I A H  
 P L L T L T S D F G R E D F H L A R L K A H L Y S A H R E L R I V D V S H  
 M S S I T L T S D F G Y D D A Y V V A A L K G A I L S T N P E A N I I D I S H  
 P P L L T L T S D F G M Q D Y L V G A V K G R L L Q Q N P E F T L V D I S H  
 M I T L A S D F F G S P Y P A A M R A A V R Q Y S D C E I I L D V A H  
 S I I T L T T D I G Q Q D Y V V A A V K G Q L Y S V I S E S L T I V D V S H  
 M L S I N P Q L S I I D I T H  
 P G A V F L Y T D Y T R L G P Y V G H L H A R L L Q V D P A P T V I D L M H  
 V I T A T S D F G P K D A T L A K A K A H F I R R V K E L Q W V D I S H

50            60            70            80

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UniRef90_H6RF01	S I R K F D P V H A A F V L R A A M D V F P K G T V H V I G I N A V E T P D H P
UniRef90_X1TSK2	T V K P Q N I P Q A A F V L G T A Y Q F F P E K T V H V V V D P G V G T E R R
UniRef90_M0L4R9	D F P R Q D V R A A A F W L R E V L P Y Y P P A T V H L V V V D P G V G T D R N
UniRef90_B5WJW6	T A P N Y D P R A G A H L L A A A L A K W Y P P D C V L L A V V D P G V G S E R D
UniRef90_L9WET2	D F P R Q D V R A A A F W L R E V L P Y F P P A T V H L V V V D P G V G T D R H
UniRef90_Q2W4T6	D A P R F D P K A S A Y L L A A A L A A N I P R Q S V V L A V V D P G V G G E R R
UniRef90_UPI0003B796AD	N A P S T D P F A S A Y L L A A A L A R W W P A G T V F L C V V D P G V G S K R
UniRef90_UPI000369609B	A V A N Y N I V E G A F L F R H A W Q A F P A G T I H L L S I N D F D Q P D R
UniRef90_Q7NJB1	Q I R P Q D L L S G R F E L M T A Y R S F P E N T V H L A I V D P G A A M G Q R
UniRef90_UPI0003479092	N V P D Y D A R A A A H L L A A L H G A Y P D G T V F L A V V D P G V G S A R E
UniRef90_E3J0M3	L I D P G D V V R R A A A F W L A Q T V R Y L P V P A T V H L A V V D P G V G T D R D
UniRef90_F8D3W6	D F P R Q D V R A A A F W L R E V L P Y Y P P A T V H L V V V D P G V G T D R D
UniRef90_G8QZF0	T I E P G N F F E A A F I L R N C Y A S F P K G T V H L V A F Q E I S E N G
UniRef90_Q3J8U0	D A P R F S P H A S A H L L A A L G Q H L P P G T V V F A V V D P G V G S S D R
UniRef90_I3YGC3	D L P P P R P D L L A A Y L L P A L V R D M P G N T L Y L C V V D P G V G G D R A
UniRef90_B7ABH1	G L P P G D L L R R A A Y Y A L F E A L P Y L P P G S V V L L A V V D P G V G T G R R
UniRef90_C0BN10	E I S P F N I I Q E C A Y I L K N A Y T H F P K G S I H I V G V D G E K T P E N P
UniRef90_W0JH94	G I E S F S L L K S A Q F I L K H S F E Y F P K G S I F L V V V D P Q V G S L A K
UniRef90_R4Z771	D I L E P R D V S G G A L R L A R S V Q W V A P G V V V A L V A P E T A A D G R
UniRef90_U1PPH9	D F P R Q D P R A A A F W L R F V L P E F P P A V H C V V I D P G V G T D R A
UniRef90_U1N216	E L P R Q D V R A A A F W C R K T L P H F P P A V H V V V D P G V G T D R D
UniRef90_V4Y951	D L P R Q D V R E S A A F W L R F A L L P E F P P A V H L A V V D P G V G T D R D
UniRef90_L0JUR8	D F P R Q D V R T A A F W L R E T L P Y F P P A T V H L V V V D P G V G T D R A
UniRef90_Q3IT9	D F P R Q D V R S T A F W L T Q T L P E F P P A V H L I V V D P G V G T G R D
UniRef90_K1HTT6	G V R N Y R V A D A G F V L S M A Y S H F P K G T I H I L S V A S A I L P F S A
UniRef90_L9XG48	D F P R Q D V R A A A F W L R E V L P Y F P P A V H L V V V D P G V G T D R K
UniRef90_D8J8I9	N L P P Q R E P R T A A F W L R E T L P W F P P A V H L A V V D P G V G T D R A
UniRef90_UPI00037249D0	D A P R F R P R E A G G L L D A L A P G L P R R C I V V A V V D P G V G S S R E
UniRef90_M0PJV9	D L P R G D P R A A A F W L R F V L P E F P P A V H C A V V D P G V G T D R D
UniRef90_UPI0003697E3F	D V N S F D I R A G A T T L L A A M L D H L S P D A I V V G V V D P S V G G R R L
UniRef90_K1Z494	S I E K F S I I L S G A F V L K S I Y R H F P P N T I F I C V I D P G V G T D R S
UniRef90_U5QMV8	Q I Q P Q D L L A A R F E L M T A Y R S F P E A T V H L V G I V D P G V G T S R R
UniRef90_UPI000400350B	E I T P F D V R E G A M M L L R Q A L P Y L P R G V H V G I V D P G V G T S R R
UniRef90_L9ZS63	D F P R Q N V R A A A F W L R E V L P Y F P P A T V H L V V V D P G V G T D R R
UniRef90_UPI0003776B03	G I E P F N I P Q A E Y V I G A F R E F P E G T V H L V A V D T H G C K R G
UniRef90_R4LHX8	S M T P W D V E E G A R Y I V D L P R F F P P E G T V H V F A T T Y P A T G T A T R
UniRef90_M1XU32	D F P R Q N V R A A A F W L A K I L P E F F P P A V H L V V V D P G V G T D R A
UniRef90_I7CYC9	D F P R Q D V R T A A F W L R E V L P Y F P P A T V H L V V I D P G V G T E R A
UniRef90_M0MVP9	D F P R Q D V R T T A F W L R E V L P Y F P P A T V H L V V V D P G V G T D R A
UniRef90_L0ICC1	D L P R Q D V R A G A F W L R E I L P S F P P A V H V I V V D P G V G T D R R
UniRef90_L0JP23	D F P R Q D V R T A A F W L R E V L P Y F P P A T V H L V V V D P G V G T D R D
UniRef90_L9Y9Z1	D F P Q Q D V R T A A F W L R E V L P Y F P P A T V H L V V V D P G V G T E R N
UniRef90_M0CMN4	D F P R Q D V R A A A F W L R E V L P Y F P P A T V H C V V D P G V G T D R S
UniRef90_F2LWX7	S I K P F N A I E A A Y I T R T T I P A F P E N S H I V V I D P G V G T N R D
UniRef90_D2RXS3	D F P R Q D V R A A A F W L R E V L P Y F P P A V H L V V V D P G V G T D R N
UniRef90_M0BUH8	D F P R Q D V R A A A F W L R E V L P Y F P P A V H L V V I D P G V G T D R N
UniRef90_E3J4N8	A V A P Q D I E H G A G L L A D S V C Y L P V G V H L V A V D V A V G T A T R
UniRef90_V4HE26	D L P R G D P R S A A V F W L R F V L P E F P P A V H L V A V D P G V G T D R A
UniRef90_W0DWX1	D L P P F R P D L L A A Y L L S A L V R D M P P R T L Y L C V V D P G V G G A R D
UniRef90_W8JNL4	T M Q P W D V E E G A R Y I V D L P R L F P E G T V F A T T Y P A T G T T A R
UniRef90_G2T9V8	D L P A F E P K L A A Y A L A A H L G P L P P D S V V G V V D P G V G G E R R
UniRef90_M0AJV7	D F P R Q D I R A A A F W L H E T L P Y F P P A V H L V V V D P G V G T D R N
UniRef90_M2NHH2	D I D K F N V F E A S L S L H R V L P Y W P S Q T I F I S V D P G V G S E R L
UniRef90_M7NU59	Q I Q H F N I A H G S F V L G N V F R E F P P G T I H L I A V H A T G L G E P
UniRef90_S6BG13	D L P P F D P V S C S P L C A A G G C R W V P R G A T V V A V V D P G V G T A R G
UniRef90_L0H0F5	D L P P F P R P D L A A Y L L P A L L R D L P P A C H L C V D P G V G G R R D
UniRef90_X1MLU1	Q I Q S F N L A Q A A F V I K N S Y P H F P S G T I H I I G V N A E A G T D Q S
UniRef90_X1B1P1	P F S I V E T A Y I I I K S T Y Y L Y P K N T I I F I V V V D P G V G S S R E
UniRef90_W9V2U0	D L P L F R P D L A G Y L L P G L V R D L P P A S L C L C V V D P G V G G E R D
UniRef90_W4VJ38	Q T V A Y W P K G T V F V S V D D P G V G S A R K
UniRef90_UPI00037E0832	N I T P F N F P Q A S Y V C R G A F K N F P E F T F H I V L I N L F G T R P E
UniRef90_M0M8Z4	D F P R Q D V R A A A F W L R E V L P Y F P P A T V H L V V V D P G V G T D R N
UniRef90_G2E0F0	D L P P F R P D L A G R L L P G L V R D I P A E S L F I C V V D P G V G G E R
UniRef90_Q0RS24	S I A P Q D V G H A I T L A G A V G Y L P A G I H L V V E R L D A D G Y T R
UniRef90_E1JYA7	D V A P Q D V L Q A G F F L A A T L P W L P P G A V V V A V V D P G V G T D R R
UniRef90_UPI000465C95F	G V A M G D V A Q A S F F L A A T L P W L P P G A V V V A V V D P G V G T A R R
UniRef90_D3RMW5	D L P P F R P D L A A Y L L P A L L R D L P R D S L V L C V V D P G V G G E R A
UniRef90_C7PKN7	Q I S P F N L P Q A T Y I C K S A F S Y Y P R T F H I V L I N L F D R K
UniRef90_X1SBR6	G S F I L F S S F K Y F P A R T I F L V V V D P G V G T S R N
UniRef90_X1N8L7	N P Q N I P Q A A F V L S T A Y Q F F P E K T I H L V V V D P G V G T E R R
UniRef90_U1QDD7	H L P A H D P R A A A F W L R F L L P E Y F P P A V H C A V V D P G V G T D R D
UniRef90_H8Z347	D L P A F P R P D L A A Y L L P G L I S G M P E R T L Y L C V V D P G V G G E R A
UniRef90_M0NZB8	D L P R G D P R A A A F W L R F V L P E F F P P A V H C A V V D P G V G T D R D
UniRef90_I2PYE0	E V A P Q N L T Q A A F F L A A T L P W L P P G A V V T A A V V D P G V G T D R R
UniRef90_T1BS28	D L S A H R I G E A A F F L L R A M A R S F P A G T V H L A V V D P G V G G R R A
UniRef90_G7V981	E V P P F D I V S G G W I L A G A L T F M P V G I H L A V V D P G V G T E R K
UniRef90_UPI0003B5E74A	N I T P F N T I E A A Y I T A T L D K F P E D S M H I V V V D P G V G T Q R N
UniRef90_R5BFG1	L Y P E G D A L N A G G M I Y S V L P F F P E G T V Y V S V V E D H T N P S R
UniRef90_V6EY94	D A P A F D P M A S A Y L L A A L L P Q M P A D A V I M A V V D P G V G G A R L
UniRef90_A4BT21	D A A A F R P R E A G Y L L A A I A H W I K P A A V V A V V D P G V G T E R R
UniRef90_L9ZU04	D F P R Q D I V R A S A F F W L R E I L P Y Y P P A V V H L V V V D P G V G T D R D
UniRef90_UPI0004754ECB	E I P T Y D I V R A A F I E N R V W R H Y P E G T I H L I S V N D Y Y Q P R G R
UniRef90_X0YDI4	S T E P Q N I L Q A A F I L G I A Y R Y F P R Q T I H V A V V D P G V G S E R Q
UniRef90_G8TAR4	T I S P F N Y P Q A A Y I S R N A I R Q F P S H T Y H L L V V N L F E K K P E Q
UniRef90_R4VVP4	D F P R Q D V R T A A F F W L R E V L P Y A P A V V H C A V V D P G V G S D R A Q
UniRef90_UPI0003726D95	Q L S S F N Y P Q A A Y I F C D S A F R H F P P G T F H I V L V N M F D Q K P T Q
UniRef90_S2DXF1	K I E N Y D V A H A A F V L K S V F R E F P K G T I H L V A M N G T S N I T D G
UniRef90_T8EDS7	R L Q G A I T L Q R T L P Y A A P G V H L A V V D P G V G T E R K
UniRef90_UPI0003B3AA99	D A P A F R A D C A A Y L L A A N L P Y L P A D A V V V L A V V D P G V G G H R R
UniRef90_A1WV95	E V E P H N I Q Q A S F I L K R A F T S F P P G T V H V F V G S G P Q Q G L T
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UniRef90\_X1TSK2  
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UniRef90\_Q3J8U0  
UniRef90\_I3YGC3  
UniRef90\_B7ABH1  
UniRef90\_C0BN10  
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UniRef90\_R4Z771  
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UniRef90\_U1N216  
UniRef90\_V4Y951  
UniRef90\_L0JUR8  
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UniRef90\_L9ZS63  
UniRef90\_UPI0003776B03  
UniRef90\_R4LHX8  
UniRef90\_M1XU32  
UniRef90\_I7CYC9  
UniRef90\_M0MVP9  
UniRef90\_L0ICC1  
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L L A V E S A G D W I L G P D N G V l L A P L I Q Q A D G A V S V W R I G W  
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UniRef90_UPI0003726D95	U L K E S T F P A K D I L A P I A A K V A S G A A I H D F G G P L P A K V		
UniRef90_S2DXF1	K G S E K S Y T F H G R D V Y A Y T G A R L A S G I T F E Q V G P E L		
UniRef90_T8EDS7	R L E P V S A T F H G R D I Y A P I A A R L A A G L D L D D V G D P L E P D A V		
UniRef90_UPI0003B3AA99	P P G I P A T F H G R D V F		
UniRef90_A1WV95	D P N D V F A T A A A H L A E G G K L E L L G P V V		
UniRef90_E0Y0R7			

UniRef90\_K2HHF3  
UniRef90\_H6RF01  
UniRef90\_X1TSK2  
UniRef90\_M0L4R9  
UniRef90\_B5WJW6       $\boxed{V}$ E  
UniRef90\_L9WET2  
UniRef90\_Q2W4T6  
UniRef90\_UPI0003B796AD  
UniRef90\_UPI000369609B  
UniRef90\_Q7NJB1      A R F  
UniRef90\_UPI0003479092  
UniRef90\_E3J0M3       $\boxed{V}$ Q L  
UniRef90\_F8D3W6       $\boxed{V}$ D L  
UniRef90\_G8QZF0  
UniRef90\_Q3J8U0  
UniRef90\_I3YGC3  
UniRef90\_B7ABH1       $\boxed{V}$ R L  
UniRef90\_C0BN10  
UniRef90\_W0JH94  
UniRef90\_R4Z771  
UniRef90\_U1PPH9  
UniRef90\_U1N216  
UniRef90\_V4Y951      T  
UniRef90\_L0JUR8  
UniRef90\_Q3IT9  
UniRef90\_K1HTT6  
UniRef90\_L9XG48  
UniRef90\_D8J8I9  
UniRef90\_UPI00037249D0  
UniRef90\_M0PJ9       $\boxed{V}$   
UniRef90\_UPI0003697E3F  
UniRef90\_K1Z494  
UniRef90\_U5QMV8      A R F  
UniRef90\_UPI000400350B  
UniRef90\_L9ZS63  
UniRef90\_UPI0003776B03  
UniRef90\_R4LHX8       $\boxed{V}$ R F  
UniRef90\_M1XU32  
UniRef90\_I7CYC9  
UniRef90\_M0MVP9  
UniRef90\_L0ICC1  
UniRef90\_L0JP23  
UniRef90\_L9Y9Z1  
UniRef90\_M0CMN4  
UniRef90\_F2LWX7  
UniRef90\_D2RXS3  
UniRef90\_M0BUH8  
UniRef90\_E3J4N8       $\boxed{V}$ R L  
UniRef90\_V4HE26  
UniRef90\_W0DWX1  
UniRef90\_W8JNL4       $\boxed{V}$ R F  
UniRef90\_G2T9V8      D R  
UniRef90\_M0AJV7  
UniRef90\_M2NHH2  
UniRef90\_M7NU59  
UniRef90\_S6BGJ3  
UniRef90\_L0H0F5       $\boxed{V}$   
UniRef90\_X1MLU1  
UniRef90\_X1B1P1       $\boxed{V}$ D F  
UniRef90\_W9V2U0      V  
UniRef90\_W4VJ38       $\boxed{V}$ C L  
UniRef90\_UPI00037E0832  
UniRef90\_M0M8Z4  
UniRef90\_G2E0F0       $\boxed{V}$   
UniRef90\_Q0RS24       $\boxed{T}$  R F  
UniRef90\_E1JYA7       $\boxed{V}$ R L  
UniRef90\_UPI000465C95F  
UniRef90\_D3RMW5       $\boxed{V}$ L L  
UniRef90\_C7PKN7  
UniRef90\_X1SBR6  
UniRef90\_X1N8L7       $\boxed{L}$ P L  
UniRef90\_U1QDD7  
UniRef90\_H8Z347  
UniRef90\_M0NZB8  
UniRef90\_I2PYE0       $\boxed{V}$ R L  
UniRef90\_T1BS28  
UniRef90\_G7V981       $\boxed{V}$ E  
UniRef90\_UPI0003B5E74A  
UniRef90\_R5BFG1  
UniRef90\_V6EY94      A R I  
UniRef90\_A4BT21  
UniRef90\_L9ZU04  
UniRef90\_UPI0004754ECB  
UniRef90\_X0YDI4  
UniRef90\_G8TAR4  
UniRef90\_R4VVP4  
UniRef90\_UPI0003726D95  
UniRef90\_S2DXF1  
UniRef90\_T8EDS7       $\boxed{V}$ E L  
UniRef90\_UPI0003B3AA99  
UniRef90\_A1WV95  
UniRef90\_E0Y0R7

This figure displays a multiple sequence alignment of UniRef90 entries, focusing on the first 40 amino acids. The sequences are color-coded by residue type: hydrophobic (black), polar uncharged (white), polar charged (red), and aromatic (blue). Conserved residues are highlighted in yellow. The alignment shows significant conservation of the signal peptide and the start of the mature protein domain.

UniRef90\_1T1BW83  
UniRef90\_D3SZW9  
UniRef90\_UP100046CD427  
UniRef90\_E1LQC4  
UniRef90\_V4ZQD9  
UniRef90\_UP10004143DCF  
UniRef90\_X1L1P9  
UniRef90\_V4J352  
UniRef90\_U5Q6A9  
UniRef90\_R5AQN7  
UniRef90\_N5MPW8  
UniRef90\_A0A034T579  
UniRef90\_T0Z7G4  
UniRef90\_I5BYC1  
UniRef90\_B7F136  
UniRef90\_UP1000479D0EF  
UniRef90\_T1BU81  
UniRef90\_G6END2  
UniRef90\_R5B4F9  
UniRef90\_R5AFH4  
UniRef90\_R9MPP0  
UniRef90\_UP1000225BB47  
UniRef90\_K8GPNO  
UniRef90\_UP1000346406B  
UniRef90\_K2CJP1  
UniRef90\_K9T6W9  
UniRef90\_K9U1D9  
UniRef90\_UP100030B8437  
UniRef90\_R5AL00  
UniRef90\_B7K8R2  
UniRef90\_K9W9L1  
UniRef90\_UP1000319AD66  
UniRef90\_D7CT40  
UniRef90\_K9XTV9  
UniRef90\_K2EU54

lupas\_21  
lupas\_14  
lupas\_28  
jnet  
conf  
sol25  
sol5  
sol0  
jhmm  
inssm

lupas\_21  
lupas\_14  
lupas\_28  
jnet  
conf  
sol25  
sol5  
sol0  
jhmm  
ipssm

The figure displays a sequence logo for a protein sequence, likely generated by a bioinformatics tool like LogoZoom. The logo is a 2D plot where the height of each letter at a given position indicates its frequency of occurrence at that position. The x-axis represents the positions of the amino acids, and the y-axis represents the amino acids themselves (A, C, D, E, F, G, H, I, K, L, M, N, P, Q, R, S, T, V, W, Y). The color scheme follows standard bioinformatics conventions: A (green), C (blue), D (orange), E (red), F (yellow), G (light blue), H (purple), I (light green), K (dark red), L (light orange), M (pink), N (light purple), P (light yellow), Q (light red), R (dark purple), S (light blue), T (light green), V (light orange), W (dark orange), and Y (dark purple).

lupas\_21  
lupas\_14

lupas\_28

jnet  
conf

conf  
sol25

50125  
5015

sol0

jhmm

jpssm

UniRef90\_T1BW83 F G P R V G S T F D G R D L | F A P A A A R L | A A G E P | L | A G | G S P  
 UniRef90\_D3SZW9 E P P A V S N S T F H G R D V | F A P A A | G D V | H E F G  
 UniRef90\_UPI00046CD427 V N P N S S S T F E A R D I M | V K A A Y M | L | K S N G | I D S | L G E E K S S L E  
 UniRef90\_E1LQC4 Q N T E H S Y T F H G R D V | Y A Y T G A K L | A S G | S F E E | V G P E L S V D Q I  
 UniRef90\_V4ZQD9 Y R D P A S A T F H G R D V | F A P A A D I  
 UniRef90\_UPI0004143DCF WR H P V S P T F H G R D I | F A P | V A A G L | S L G I | S L Y E F G E K I  
 UniRef90\_X1L1P9 R P P A L S D S F H G R D L | F A P | L A A Q I | V Q G D L | P D  
 UniRef90\_V4J352 N D Q E S H G S F S A L | K L | F | V K  
 UniRef90\_R5AQAN7 P | V G A N L | Y A Y T A G | L | A S G | R | F E A | V G G E M E | P E Q I  
 UniRef90\_N5MPW8 P H S E E S H T F H G R D V | Y A Y T G A R L | A A N I | A F E R L | G Q A I | N | V D S I |  
 UniRef90\_A0A034T579 Q G S E K S Y T F H G R D V | Y A Y T G A R L | A S G | R | F E Q V | S P R L | P N Q I |  
 UniRef90\_TOZ7G4 F G G | L A S P T F Q G R D | L | F A P | V A A L | C | R G R S A S E L | G | P E V | R | P C D L |  
 UniRef90\_B7F136 Y Y G D | S Q T F H G R D | I | F S P | A A A Y | H | L G | K | F E Q | L | G D Q | L |  
 UniRef90\_UPI000479D0EF P | L | S A S F H G R D | L | F | V | P | W A | L | R | L |  
 UniRef90\_T1BU81 S N T E | L | S Y T F H G R D | V | Y A Y T G A K | L | A S G | S F E E | V G P E | L | P | V | D | K | I |  
 UniRef90\_G6END2 C Y G E K T A | L | C | H | G R D | L |  
 UniRef90\_R5B4F9  
 UniRef90\_R5AFH4  
 UniRef90\_R9MPP0  
 UniRef90\_UPI000225BB47  
 UniRef90\_K8GPNO  
 UniRef90\_UPI000346406B  
 UniRef90\_K2CJP1  
 UniRef90\_K9T6W9  
 UniRef90\_K9U1D9  
 UniRef90\_UPI00030B8437  
 UniRef90\_R5AL00  
 UniRef90\_B7K8R2  
 UniRef90\_K9W9L1  
 UniRef90\_UPI000319AD66  
 UniRef90\_D7CT40  
 UniRef90\_K9XTV9  
 UniRef90\_K2E5U1  
 UniRef90\_T1BW83 F G G K Y V | H | S | P | T | V | G | K | V | A | S | G | I | E | I | S | K | L | G | N | K | F | E | L | D | K | L |  
 UniRef90\_UPI000225BB47 N R D | V | N | G | L | S | F | G | G | K | Y | V | Q | V | P | T | A | A | K | I | L | A | G | F | E | W | K | E | L | G |  
 UniRef90\_K8GPNO G S Q | F | R | S | R | D | V | F | P | P | A | A | G | A | I | A | H | G | D | L | G | L | V | G | E | A | I | A | P | S | Q | I |  
 UniRef90\_UPI000346406B S R G G S | Q | F | R | S | R | D | V | F | P | P | A | A | A | A | A | A | R | G | E | K | D | L | G | E | A | I | A | P | E | R | I |  
 UniRef90\_K2CJP1 D | H | L | L | Y | S | H | V | F | D | G | L | A | S | F | G | P | T | V | A | L | L | L | N | G | F | N | P | E | E | F | S | N | A | Y | P | V | S | E | I |  
 UniRef90\_K9T6W9 S R G G S | Q | F | R | S | R | D | V | F | P | T | A | A | A | A | L | V | Q | G | D | R | S | L | L | G | D | E | I | S | P | E | Q | I |  
 UniRef90\_K9U1D9 S R G G S | Q | F | R | S | R | D | V | F | P | Q | A | A | A | A | I | A | S | D | D | L | S | L | L | G | D | E | L | D | P | Q | Q | I |  
 UniRef90\_UPI00030B8437 S R G G S | Q | F | R | S | R | D | V | F | P | N | A | A | A | A | I | A | Q | G | D | F | S | L | L | G | E | V | L | H | P | S | N | I |  
 UniRef90\_R5AL00 C | A | L | E | S | G | G | P | S | H | G | R | N | L | A | Y | C | A | A | Q | L | A | C | G | R | S | F | T | A | M | G | E | A | F | P | A | D | G | L |  
 UniRef90\_B7K8R2 K | V | S | R | G | G | S | Q | F | R | S | R | D | V | F | P | Q | A | A | G | A | I | A | S | G | D | L | S | L | L | G | E | Q | I | F | P | E | Q | I |  
 UniRef90\_K9W9L1 V | A | A | E | G | S | Q | F | R | S | R | D | V | F | P | Q | A | A | G | A | I | A | L | G | Q | P | D | A | L | G | E | E | I | S | S | S | D | I |  
 UniRef90\_UPI000319AD66 S R G G S | Q | F | R | S | R | D | V | F | P | P | A | A | A | I | V | N | E | D | F | T | L | L | G | D | S | L | D | P | E | Q | I |  
 UniRef90\_D7CT40 V | P | A | A | G | S | Q | F | R | S | R | D | V | F | P | R | A | V | A | I | A | L | G | E | P | D | A | L | G | D | A | L | R | P | G | D | V |  
 UniRef90\_K9XTV9 Q | V | S | R | G | G | S | Q | F | R | S | R | D | V | F | P | Q | A | A | A | I | A | L | G | D | Y | S | L | L | G | E | T | I | L | P | T | Q | I |

lupas\_21  
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UniRef90\_T1BW83  
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UniRef90\_X1L1P9  
UniRef90\_V4J352  
UniRef90\_U5Q6A9  
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UniRef90\_K9W9L1  
UniRef90\_UPI000319AD66  
UniRef90\_D7CT40  
UniRef90\_K9XTV9  
UniRef90\_K2EU54

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sol5  
solo  
jhmm  
jpssm